Manual for setting of Bitrix24 and IP-PBX Yeastar S-series integration via API

Manual to the version 2.0-api dd. 18.03.2020

The integration via API is supported only by IP-PBX Yeastar S50 and later versions. This manual describes the setting of integration via API. The manual for setting of integration via AMI (for Yeastar S20) can be downloaded here.

To set up the integration you need:

- **IP-PBX S-Series** (S50, S100, S300) with the installed latest updates
- **Static IP-address** (it is purchased from your internet service-provider)
- **Bitrix24 Cloud-version or box-version** in any version
- You need a valid **SSL-certificate** for Bitrix24 box-version

Important notes:

- The integration module supports the **internal numbers with up to 4 signs inclusive**
- PBX must be configured for the work with **international phone number** formats such as +XXXXXXXX

**How the integration works:**
The application realizes the connection of API IP-PBX Yeastar S with REST API Bitrix24, as well as converts at the side of your external server the conversation records files form wav format (conversation records are created in IP-PBX Yeastar only in wav format) into mp3 format (Bitrix24 accepts the conversation records only in mp3 format). Such a realization allows removing a significant load from IP-PBX processor. It is important to understand that the voice SIP traffic does not go out the framework of your PBX. In Bitrix24 it transmits only: REST API request for raising the call card, phone number and conversation record.
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1. IP-PBX Yeastar settings

1.1 API settings

Open the PBX admin panel and go to the section “Settings – PBX – General”, then go to the tab “API” and configure the following:

- **Tick Enabled**
- Change the standard **User name** and **Password** (*these user name and password should be entered in the module settings of Bitrix24 side*)
- In the tab “Extension”, in the field “Status Monitor”, tick the line for extension numbers of employees, whose calls should be integrated with CRM Bitrix24

Then go to the tab “Trunk”, and tick the lines, whose calls should be integrated with CRM Bitrix24.
1.2 Network Services Settings

Open the PBX admin panel and go to the section “Settings – System – Security”, then go to the tab “Service” and configure the following:

- Check that in the field “Protocol” HTTP is selected
- Set the value for the field “Port”. You may leave the standard value 8088.

If you previously configured this PBX for integration via AMI, then you may untick “Enable AMI” at the bottom of this page admin panel.
1.3 Database access settings

In the same section **Settings – System – Security** open the tab **Database access** and click the button **Add**

Fill in the following fields in the opened window:

- **User name** – choose a login for the access to the database
- **Password** - choose a password for the access to the database
- **Allowed IP** – fill in here the IP-address **178.172.236.24**

Click "Save"
2. Router settings

To connect the telephony module with your PBX, you need a static IP-address and the following three ports should be forwarded through NAT to PBX:

- **8888 TCP** (or other port, indicated by you in cl. 1.2) – for access to API Yeastar
- **3306 TCP** – for access to database CDR Yeastar

**Safety notes!** We recommend opening these ports only for IP-address of the telephony server 178.172.236.24

Interface of settings of ports forwarding differs depending on the router used in your network. You can find the current manual on port forwarding for your router on the internet.
3. Bitrix24 settings

3.1 Module installation

Module is installed from the Bitrix24 application directory https://www.bitrix24.com/apps/?app=atevi.yeastar. After installation, the module can be tested within 30 days for free.

3.2 Outgoing line settings in Bitrix24

When the application is installed, go to the Bitrix24 telephony main settings and choose the application “Yeastar” as the main direction for outgoing calls.

To do this, add /telephony/configs.php in the browser address bar after your Bitrix24 address

For example, if your Bitrix24 address is https://mycompany.bitrix24.com/ , you will get the link https://mycompany.bitrix24.com/telephony/configs.php

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Settings ✭

Configure default numbers

Your counterpart will see this number when you call them using Bitrix24

Default number for outgoing calls

Application: Yeastar

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3.3 Settings of the internal numbers of the users

The next step of the setting is to register in the profile of each user of your Bitrix24 who will use telephony, his personal internal number on your PBX.

To do this, open an employee profile, click “edit” in the block “Contact information”.

Click “Internal phone” and enter there the internal phone number of the employee, click “Save”.

Repeat this operation with each user of your Bitrix24, who will use the telephony.
3.4 Yeastar module settings

Find left in the main menu of your Bitrix24 the clause “Applications”. On the page that opened, find in the upper menu the clause “Yeastar” (if the clause “Yeastar” is not available, click the link “More” at the top right and find in the drop-down list the clause “Yeastar”).

In the module “Yeastar” go to the tab “Settings” and fill out the three settings blocks:

3.4.1 Settings of the connection to API Yeastar

- Tick the field “Integration via API”
- **Host API** – your external static IP address at which IP-PBX is available
- **Port API** – port that is set by you in the PBX settings *(Settings - System – Security – Services)* see cl. 1.2
- **Login API and password API** – enter here your login and password that were indicated by you in API settings *(Settings - PBX – General - API)*, see cl. 1.1
- **API version** – based on the firmware version of your PBX, it is necessary to select the appropriate version of the APIs

To compare the firmware version of your IP PBX Yeastar with the API version, see the information on this page [https://help.yeastar.com/en/s-series-developer/api/api_change_logs_s.html](https://help.yeastar.com/en/s-series-developer/api/api_change_logs_s.html)

For example, firmware version 30.11.0.7 is an API version v1.1.0:

**API Change Logs**

When sending an API request, the request address must include the API version. All request samples in this guide use (api version) to represent the API version.

API v1.1.0 (PBX 30.11.0.7)

This API update is compatible with Yeastar S-Series VoIP PBX 30.11.0.7 or later.

- **PBX serial number** – enter the serial number of your IP-PBX in this field. Checking by serial number is an additional measure of data protection.

The serial number of your PBX, as well as the firmware version can be viewed in the admin panel by clicking on the “Resource Monitor” icon in the upper right corner.
3.4.2 Settings of the CDR Yeastar database access

- **host** – your static IP address
- **port** – 3306 is a standard port for access to the database, do not change it
- **Login** and **password** - enter the user name and the password specified by you in the settings (Settings – System – Security – Database access) see the manual p.1.2.
3.4.3 Settings for incoming line processing

In this section, the rules of processing incoming line of your IP-PBX are configured.

- **Turn on the trunk processing** – selection of lines that will be integrated with CRM
- **Responsible for new lead** – selection of new CRM Bitrix24 user, who will be appointed as responsible for new leads, created from this line
- **Transfer the call to the responsible** – this tick turns on the functionality of a smart routing on the selected line. If the incoming call to CRM contains an entity (lead, deal, company, contact) with the same phone number, the call is automatically routed to the internal number of the employee, indicated by the responsible for this entity.
- **Transfer the call to IVR or groups for new client** – selection of IVR or group, to which the call will be redirected in case if: automatic transfer to the responsible employee is turned off, the call is from a new number or if the automatically identified responsible employee (namely his internal number) is busy

<table>
<thead>
<tr>
<th>Trunk name</th>
<th>Turn on processing trunk</th>
<th>Responsible for new lead</th>
<th>Transfer call to responsible</th>
<th>Transfer the call to IVR or group for new client</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>answer</em></td>
<td>✓</td>
<td>1002: Andrey Lysiuk</td>
<td>✓</td>
<td>ivr_6502: Support</td>
</tr>
<tr>
<td><em>Brest</em></td>
<td>✓</td>
<td>1002: Andrey Lysiuk</td>
<td>✓</td>
<td>ivr_6503: Support2</td>
</tr>
<tr>
<td><em>answer-support</em></td>
<td>✓</td>
<td>1002: Andrey Lysiuk</td>
<td>✓</td>
<td>ivr_6502: Support</td>
</tr>
<tr>
<td><em>A1</em></td>
<td>✓</td>
<td>1002: Andrey Lysiuk</td>
<td>✓</td>
<td>ivr_6503: Support2</td>
</tr>
<tr>
<td><em>A1-mosk</em></td>
<td>✓</td>
<td>1002: Andrey Lysiuk</td>
<td>✓</td>
<td>ivr_6502: Support</td>
</tr>
</tbody>
</table>

3.4.4 Settings of the internal numbers of the employees

In the section “employees”, select the internal numbers of employees who will use CRM Bitrix24 CRM. The integration will work only with the internal numbers, indicated in this section.

- **Create a lead for unknown number** – when unticking, the leads for new phone numbers will no longer be created for this employee
- **Auto pick up of outgoing calls** – when ticking, for this employee, for an outgoing call, the handset of your IP-phone will be picked up automatically by clicking the client’s phone number in CRM.
The standard version of the module supports the integration of up to 30 internal numbers

<table>
<thead>
<tr>
<th>Employee</th>
<th>Create a lead for unknown number</th>
<th>Auto pick up of outgoing calls</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000: Nikolay Kovalevich</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>1002: Andrey Lysiuk</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>392: Alexander Klimovich</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3.5 Symbols of the connection status

For simple and quick acceptance of information on the connection status to individual integration services (AMI, FTP, connection to the database), the following graphical symbols of the connection status are entered in the module settings:

- ☓ No connection
- ☓ Not all data required for connection has been entered.
- ☓ Everything is OK

Please, be reminded, that the state of connection indicators changes only in case of manual reload of settings page in browser.
3.6 Technical assistance

To get a technical assistance on module configuration, find in the main menu of your Bitrix24 the clause “Applications”. On the page that opened, find in the upper menu the clause “Yeastar” (if the clause “Yeastar” is not available, click the link “More” at the top right and find in the drop-down list the clause “Yeastar”). In the module “Yeastar” go to the tab “Technical assistance” and fill out the appropriate fields:

<table>
<thead>
<tr>
<th>Field</th>
<th>Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tariff Bitrix24</td>
<td>Cloud: Project</td>
</tr>
<tr>
<td>Problem</td>
<td>The call card did not rise</td>
</tr>
<tr>
<td>The direction of the call</td>
<td>Outgoing</td>
</tr>
<tr>
<td>Client’s phone number</td>
<td></td>
</tr>
<tr>
<td>Call’s date and time</td>
<td></td>
</tr>
<tr>
<td>Your email</td>
<td></td>
</tr>
<tr>
<td>Comments</td>
<td></td>
</tr>
</tbody>
</table>

Please be noted that You can create a request for technical support only through a form, located in tab “technical assistance” in the application or e-mail yeastar-support@atevisystems.com (indicating URL-address of your Bitrix24). Telephone consultations on setting up the application are not carried out.